<u>Amendments to the Specification</u>:

Please replace paragraph [0019] beginning at page 10, line 5 with the following amended paragraph:

--Thus, as shown in Fig. 3(d), even when a high-level clock signal is outputted from the oscillator 6 at intervals of a time period tb, the RS flip-flop 5 continues to output a low-level signal, as shown in Fig. 3(c), because a high-level signal is inputted from the comparator 4 to the reset terminal of the RS flip-flop 5, as shown in Fig. 3(e). Thus, the driver 1 keeps the MOS transistor Tr1 off and the MOS transistor Tr2 on.--

Please replace paragraph [0021] beginning at page 11, line 1 with the following amended paragraph:

-- Thus, the driver 1 turns the MOS transistor Tr1 on and the MOS transistor Tr2 off, whereby a current begins to flow through the coil L, as shown in Fig. 3(a). As a result, the voltage VL inputted to the inverting input terminal of the comparator 4 is dropped by the current IL flowing through the coil L. As the current IL flowing through the coil L increases, as shown in Fig. 3(a), the voltage VL inputted to the inverting input terminal of the comparator 4 decreases, as shown in Fig. 3(b). When the voltage VL becomes lower than the voltage Vth from the level shifter 3, as shown in Fig. 3(b), the signal from the comparator 4 is switched to high level, as shown in Fig. 3(e). As a result, the signal from the RS flip-flop 5 turns to low level, as shown in Fig. 3(c).--

Please replace paragraph [0027] beginning at page 13, line 11 with the following amended paragraph:

--Furthermore, as shown in Fig. 4, a resistance Ra is connected, at one end thereof, to the inverting input terminal of the comparator 4 and, at the other end thereof, to a node at which the source of the MOS transistor Tra and the drain of the MOS transistor Trb are connected together, and a constant-current power supply 11 that feeds a constant current is connected to the inverting

input terminal of the comparator 4. The other end of the constant-current power supply 11 is grounded. In this way, by connecting the resistance Ra and the constant-current power supply 11 together, a voltage drop Ra x Ioff across the resistance Ra caused by the passage of a constant current Ioff fed from the constant-current power supply 11 through the resistance Ra is added as an offset voltage Voff. That is, the resistance Ra and the constant-current power supply ~~10~~ 11 function as a voltage source 20.--

Please replace paragraph [0035] beginning at page 16, line 4 with the following amended paragraph:

--As is the case of the first embodiment, also in this embodiment, when a heavy load is connected as described above, the voltage obtained by detecting the current IL flowing through the coil L is sufficiently higher than the offset voltage Vxoff from the voltage source 20a. That is, the voltage values Vhoff and Vloff added as an offset voltage Vxoff each fall within the voltage range in which the influence thereof on the voltage VL inputted to the inverting input terminal of the comparator 4 is so small that it can be ignored.--

Please replace paragraph [0042] beginning at page 19, line 8 with the following amended paragraph:

--When a current detection circuit 10 having the same configuration as that shown in Fig. 4 of the first embodiment is incorporated in the switching power supply apparatus described above, the relation of connection between the current detection circuit 10 and the comparator 4 is shown in Fig. 8. In this case, as shown in Fig. 8, a resistance Ra used for adding an offset voltage Voff is replaced with a variable resistance Rb that can switch a resistance value depending on the output of the comparator 4. That is, the variable resistance Rb and the constant-current power supply 11 constitute a voltage source ~~21a~~ 20a. Other circuit blocks are the same as those in Fig. 4.--

Please replace paragraph [0053] beginning at page 23, line 3 with the following amended paragraph:

--When the slope compensation voltage Vslope from the voltage source 21 decreases from a maximum value VSmax to a minimum value of zero, as shown in Fig. 11(f), immediately before a clock is outputted from the oscillator ~~5~~ 6, as shown in Fig. 11(c), the voltage Vth outputted from the level shifter 3 becomes lower than the voltage VL, as shown in Fig. 11(b). That is, when the value of the voltage VL fed to the inverting input terminal of the comparator 4 increases by changing from Vcc – Voff – VSmax to Vcc – Voff, as shown in Fig. 11(b), the voltage Vth becomes lower than the voltage value given by Vcc – Voff.--

Please replace paragraph [0054] beginning at page 23, line 4 with the following amended paragraph:

--At this time, as shown in Fig. 11(e), a low-level signal is outputted from the comparator 4, and, immediately after the slope compensation voltage Vslope decreases from a maximum value VSmax to a minimum value of zero, a high-level clock signal is outputted from the oscillator 6, as shown in Fig. ~~7(d)~~ 11(d). Thus, a high-level signal is inputted to the set terminal of the RS flip-flop 5 after a low-level signal is inputted to the reset terminal thereof, whereby the signal from the RS flip-flop 5 is switched to high level, as shown in Fig. 11(c). On the other hand, after the slope compensation voltage Vslope reaches to a minimum value of zero, it gradually increases again, as shown in Fig. 11(f). Thus, as shown in Fig. 11(b), as the slope compensation voltage Vslope increases, the voltage VL fed to the inverting input terminal of the comparator 4 decreases.--

Please replace paragraph [0057] beginning at page 25, line 12 with the following amended paragraph:

--When a current detection circuit 10 having the same configuration as that shown in Fig. 4 of the first embodiment is incorporated in the switching power supply apparatus described above, the relation of connection between the current detection circuit 10 and the comparator 4 is

shown in Fig. 12. In this case, as shown in Fig. 12, the current source 21 is built with an n-channel MOS transistor Trx that is connected, at the drain thereof, to a node at which the resistance Ra and the constant-current power supply 11 are connected together, a MOS transistor Try that is connected, at the gate and the drain thereof, to the gate of the MOS transistor Trx, a MOS transistor Trz that is connected, at the drain thereof, to the source of the MOS transistor Try, a resistance Rc that is connected to the source of the MOS transistor Trx, a capacitor C1 that is connected to the source of the MOS transistor Try, and a constant-current power supply 12 that is connected to the drain of the MOS transistor ~~Trx~~ Try. Other circuit blocks are the same as those in Fig. 4.--

Please replace the heading at the top of page 30 with the following:

-- ~~CLAIMS~~

What is claimed is: --